

S/126/61/012/004/018/021
E193/E383

AUTHORS: Kagan, A.S., Rass, T.G. and Gorazdovskiy, T.Ya.

TITLE: Some laws governing the formation of, so-called,
"friction austenite"

PERIODICAL: Fizika metallov i metallovedeniye, v. 12, no. 4,
1961, 617 - 619

TEXT: Abrasion-treatment of certain hardened steels brings about the formation of a surface layer, characterized by high hardness and by a structure which is difficult to reveal by metallographic methods. X-ray examination of layers of this type showed them to contain austenite in quantities greater than those in the unaffected part of the specimen - hence the term "friction austenite". The object of the present investigation was to study the relationship between the quantity of friction austenite and the initial quantity of residual austenite in the steel 11X15 (ShKh15), hardened by quenching from 850 °C. Specimens with a different residual-austenite content were obtained by varying the conditions of sub-zero treatment of hardened material. The residual-austenite content was determined

Card 1/4

S/126/61/012/004/018/021
E193/E383

Some laws governing

by the magnetic ballistic method, the quantity of the friction austenite being measured by X-ray diffraction. It was found that with increasing residual-austenite content the quantity of friction austenite decreased, its formation ceasing altogether at an (extrapolating) residual austenite content of 35%. If the theory is accepted that friction austenite is formed because of the friction-generated heat raising the temperature of the surface layer to the austenitic range, complete conversion of the resultant austenite to martensite being prevented by the presence of distortions of the second type which retard the $\gamma \rightarrow \alpha$ transformation, the magnitude of the distortion of the second type in abraded surface layers should decrease with increasing proportion of the friction austenite. This postulate was confirmed experimentally by measuring the width of X-ray diffraction lines (311). The results are reproduced in Fig. 2, where the width of the reflections (B, mm) is plotted against the austenite content in hardened specimens (circles) and in hardened and abraded material (triangles). It will be seen that B of hardened material decreases with increasing residual

Card 2/4

8/126/61/012/004/018/021
E193/E383

Some laws governing

austenite content and that the increase in B due to abrasion-induced work-hardening is almost constant, irrespective of the residual-austenite content. It is true that both the initial B and its increase reflect not only distortions of the second type but also dispersion of the mosaic blocks formed as a result of both $\gamma \rightarrow \alpha$ transformation and work-hardening and that separation of these two effects is, in this case, rather difficult. It can, however, be assumed that the part of the total increase in B which is caused by work-hardening and phase-transformation does not depend on the residual-austenite content. Consequently, it is valid to infer from B the relationship between the magnitude of distortion of the second type and the residual-austenite content. The proportion of friction austenite in steel ShKh15 decreased also (with a corresponding increase in the proportion of martensite) after tempering at 160°C. This effect can be attributed to stress relief and to the consequent decrease in the stability of austenite. There are 2 figures and 8 Soviet-bloc references.

✓

Card 3/4

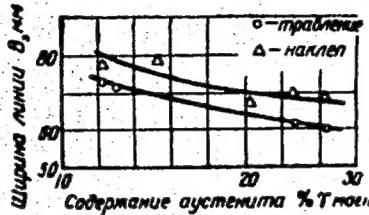
S/126/61/012/004/018/021
E193/E383

Some laws governing

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy
konstruktorsko-tehnologicheskiy institut
podshipnikovoy promyshlennosti g. Moskva
(All-Union Scientific-research Design-technology
Institute for the Bearings Industry, Moscow)

SUBMITTED: January 10, 1961

Fig. 2:



Card 4/4

GORAZDOVSKIY, T.Ya.; KAGAN, A.S.; RASS, T.G.

Quantitative determination of residual austenite using an apparatus
with scintillation recording. Zav.lab. 28 no.5:597 '62.

1. Vsesoyuznyy nauchno-issledovatel'skiy institut podshipnikovoy
promyshlennosti.

(MIRA 15:6)

(Austenite)

GORAZDOVSKIY, Tadeush Yanushevich, kand. tekhn. nauk; MEL'NIKOVA,
Zh.M., red.

[Nondestructive testing of metals; physical means of providing reliability] Nerazrushaiushchii kontrol' metallov; fizicheskie sredstva obespecheniya nadezhnosti. Moscow, Izd-vo "Znanie," 1964. 39 p. (Novoe v zhizni, nauke, tekhnike. IV Seriya: Tekhnika, no.12) (MIRA 17:7)

ACC NR: AF7007623

SOURCE CODE: UR/0386/67/005/003/0078/0082

AUTHOR: Gorazdovskiy, T. Ya.

ORG: none

TITLE: Hard radiation from solids failing in shear

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 5, no. 3, 1967, 78-82

TOPIC TAGS: high pressure research, compressive stress, torsion stress, light emission, x ray emission, shear strength, material failure

ABSTRACT: The purpose of the investigation was to assess the damage produced in a solid by an appreciable shear deformation and in particular to analyze the radiation effects accompanying this damage, since earlier investigators paid no attention to these phenomena. The experiments were based on the hypothesis that failure in shear begins with formation of minute internal cavities and that the cavity-formation process, and hence the failure, can be countered by a hydrostatic compression of appreciable magnitude. To check on this proposition, a solid sample was subjected to combined axial and tangential forces in specially developed equipment, which is described in some detail. The tested substances were various nonexplosive polycrystalline dielectrics and semiconductors (marble, basalt, coal) both with native (undisturbed) structure and in the form of tablets pressed from their powders. At a certain value of the shear deformation, an explosion occurred, consisting of a sound effect, scat-

Card 1/2

UDC: none

ACC NR: AP7007623

tering of the finely dispersed material, and emission of blue-violet light and hard radiation with wavelength of about 0.5 Å (~25 kev) or even harder. It is concluded that the results reveal a hitherto uninvestigated process of failure under strong tangential stresses, resulting from adhesion of the tested material to the surfaces of the plungers and a result of prevention (by high hydrostatic pressure) of formation of internal cavities. Orig. art. has: 3 figures. [02]

SUB CODE: 20/ SUBM DATE: 11Oct66/ ORIG REF: 001/ OTH REF: 003 /

ATD PRESS: 5117

Card 2/2

ALESHIN, S.N., doktor sel'skokhosaystvennykh nauk, prof. GORE, A.I.,
mladshiy nauchnyy sotrudnik.

Determining adsorbed sodium in soils [with summary in English].
Inv. TS KhA no.4:88-97 '60. (MIRA 13:9)
(Soils--Sodium content)

AMSHINSKIY, N.N.; MARIICH, I.V.; MOLCHANOV, V.I.; ORLOVA, L.I.;
GORB, A.M.; KUZNETSOV, Yu.A., nauchn. red.; SMORCHKOV,
I.Ye., nauchn. red.; KRYZHANOVSKIY, V.A., ved.red.

[Accessories of the granitoids of the Altai and methods
for studying them] Aktsessori granitoidov Altaia i me-
todika ikh izuchenia. Moskva, Nedra, 1964. 175 p.
(MIRA 17:10)

1. Chlen-korrespondent AN SSSR (for Kuznetsov).

GORB, F.V.

Establish a better system of wages for hatcheries. Ptitsevodstvo
8 no.5:36 My '58. (MIRA 11:5)

1. Starshiy bukhgalter Znamenskoy inkubatorno-ptitsevodcheskoy
stantsii, Kirovogradskoy oblasti.
(Poultry hatcheries) (Wages)

GORB, G.D.

Side effects of anticoagulants of the coumarin series. Vrach.
delo no. 1:120-121 '61. (MIRA 14:4)

1. Terapevticheskaya otdeleniya No.2 Kramatorskoy bol'nitsy No 3.
(ANTICOAGULANTS (MEDICINE)) (COUMARIN)

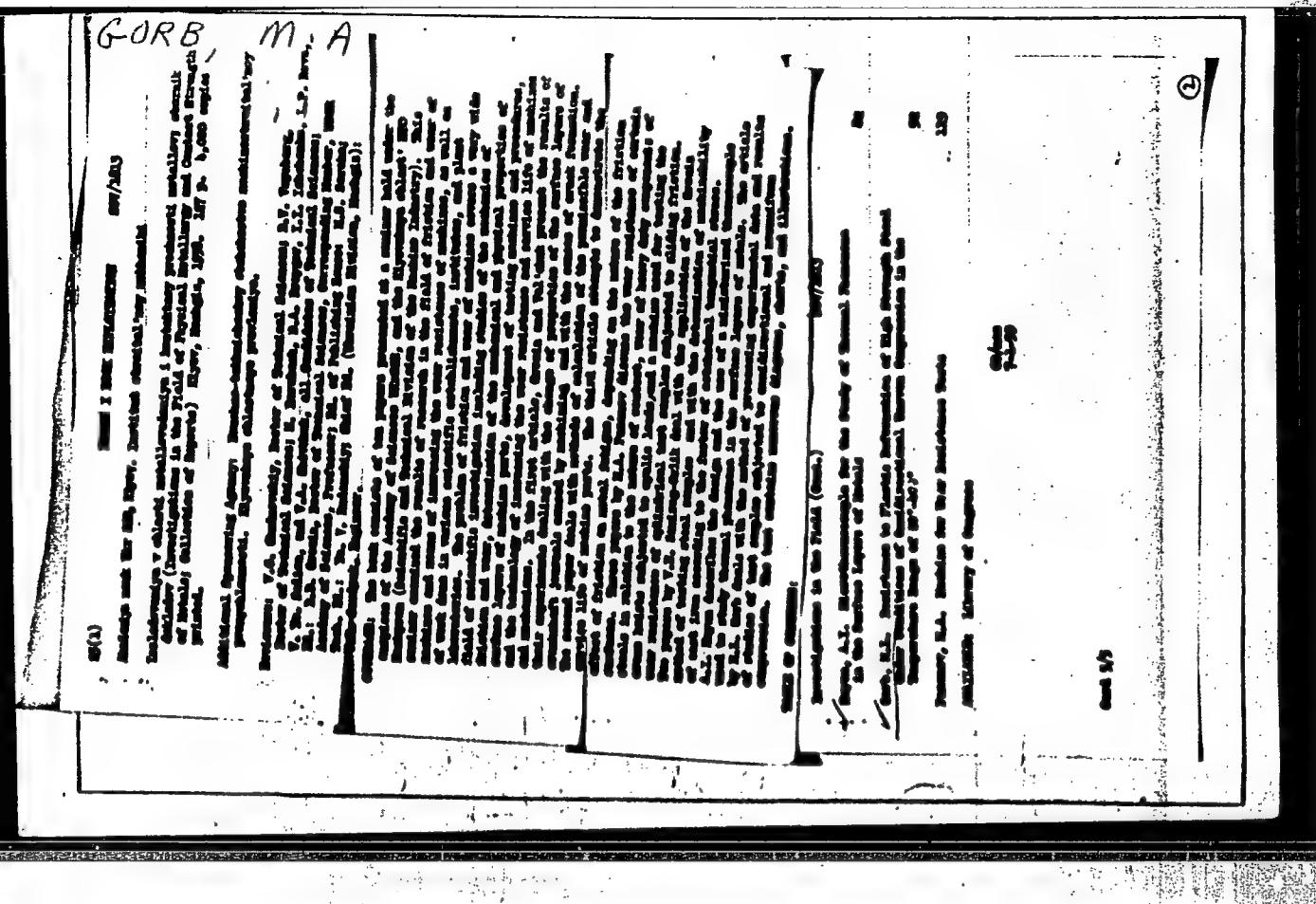
GORB, G.D.

Complications in treatments with the steroid hormones of the adrenal cortex. Sovet. med. 26 no.5:39-41 My'63 (MIRA 17:1)

1. Iz terapevcheskogo otdeleniya No.2 (zav. G.D. Gorb) mediko-sanitarnoy chasti (glavnnyy vrach - zasluzhennyy vrach UkrSSR N.F. Belobrov) Novo-Kramatorskogo mashinostroitel'nogo zavoda.

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000516020014-2



APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000516020014-2"

GORB, M. L.

GROZIN, B.D.; SEMIROG-ORLIK, V.N.; GORB, M.L.

Electron microscopic examination of steels subjected to plastic
deformations. Sbor. trud. Inst. stroi. mekh. AN UkrSSR no. 22:5-24 1956
(MLRA 10:5)

(Steel--Metallography)

SOV/124-58-1-1295

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 1, p 160 (USSR)

AUTHOR: Gorb, M. L.

TITLE: On a Method for the Construction of Hardening Curves of High-strength Steels Relative to Nonuniform Triaxial Compression (O metodike postroyeniya krivykh uprochneniya vysokoprochnykh stalei v usloviyakh vsestoronnego neravnomernogo szhatiya)

PERIODICAL: Sb. tr. In-ta stroit. Mekhan. AN UkrSSR, 1956, Nr 22, pp 35-55

ABSTRACT: Examination of a method of testing specimens of heat-treated high-strength steel for compression in a steel compression jig. The method permits a determination of the plastic-strain characteristics of these steels, as well as of the hardening thereof due to plastic strain. The author proposes formulas for the computation of the stress and strain intensities; these formulas are based on a theoretical investigation of the stresses and strains with due consideration of the friction forces acting on the end faces of the specimen. Certain special functions that enter into the formulas are tabulated; test results and their analysis for ShKh15 steel are adduced.

S. V. Boyarshinov

Card 1/1

Gorb, M. L.

124-1957-10-12270 D

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 10, p 148 (USSR)

AUTHOR: Gorb, M. L.

TITLE: The Resistance to Plastic Deformation of High-strength Steels
Under Non-uniform Volumetric Compression at High Tempera-
tures (Soprotivleniye plasticheskому deformirovaniyu
vysokoprochnykh stalei v usloviyakh ob'yemnogo neravnomernogo
sashatiya pri povyshennykh temperaturakh)

ABSTRACT: Bibliographic entry of the Author's dissertation for the degree
of Candidate of Technical Sciences, presented to the In-t stroit.
mekh. AN USSR (Institute of Structural Mechanics, UkSSR
Academy of Sciences), Kiyev, 1957.

ASSOCIATION: In-t stroit. mekhan. AN USSR (Institute of Structural
Mechanics, UkSSR Academy of Sciences), Kiyev.

Card 1/1

GROZIN, B. D., VAL'CHUK, G. I., and GORB, M. L.

GORB, M. L.

"Physical State of external Layers of Machine Parts" p. 32-40, in book Research in the Physics of Solids, Moscow, Izd-vo AN SSSR, 1957. 277 p. Ed. Bol'shanina, M. A. Tomsk Universitet, Siberskiy fiziko-tehnicheskij institut.

Wear tests were performed on the MI machine. Different steels studied: steel R18, steel R9, steel 15 ShKh 15, steel U8. There are 9 figures and 1 Soviet reference.

This collection of articles is meant for metallurgical physicists and for engineers of the metal-working industry. This book contains results of research in the field of failure and plastic deformation of materials, mainly of metals. Problems of cutting, abrasion, friction, and wear of solid materials (metals) are discussed.

SOV/123-59-12-46051

Translation from: Referativnyy zhurnal.. Mashinostroyeniye, 1959, Nr 12, p 25 (USSR)

AUTHORS: Grozin, B.D., Val'chuk, G.I., Gorb, M.L.

TITLE: The Physical State of the Surface Layers of Machine Parts

PERIODICAL: V sb., Issled. po fiz. tverdogo tela. Moscow, AS USSR, 1957, pp 32-40

ABSTRACT: The Institute of Construction Mechanics of the AS UkrSSR carried out investigations on the complex application of research methods with the aid of electron microscopes, analysis of metal structure, X-rays and spectrum analysis in studying the mechanism of origination and destruction of the surface layer. Besides, different methods of the hardening technique have been worked out, which are applicable to the operating conditions of the machine parts. The investigations proved that the outer (active) metal layers are formed under the effect of all technological processes, both thermal and mechanical. The presence of structural stress concentrators is an important factor, lowering the durability of machine parts. Plastic deformation and heating of the outer metal layers as a result of friction, cause changes in the mechanical properties of various steel grades up to

Card 1/2

The Physical State of the Surface Layers of Machine Parts

SOV/123-59-12-46051

different degrees and in different directions, depending on the composition of the steel grade, processing conditions and the heating temperature of the machine part during the operation process. Diagrams of the test results are given for metals of various grades. 9 figures.

P.V.M.

Card 2/2

G.R.B., M.L.

PAGE 1 BOOK EXPLANATION

Sov/5053

Vsesoyuznaya konferentsiya po treniiu i iznosu v mashinakh. 34.
1958.

Iznos i iznosotolost'. Antifrictional Materials (Wear and
Wear Resistance; Antifriction Materials) Moscow Izd-vo AM
SSSR, 1960. 273 p. Errata slip inserted. 3,500 copies printed.
(Series: Ibs: Trudy, v. 1)

Sponsoring Agency: Akademija nauk SSSR. Institut mashinovedenija.
Rep. Ed.: M. N. Kharushchov, Professor; Eds of Publishing
House: N. Ya. Lebedev, and S. L. Orpik; Tech. Ed.:
T. V. Polyakova.

PURPOSE: This collection of articles is intended for practicing
engineers and research scientists.

COVERAGE: The collection, published by the Institut mashinovedenija,
AS SSSR (Institute of Science of Machines Academy of Sciences
USSR) contains papers presented at the III Vsesoyuznaya Kon-
ferentsiya po treniiu i iznosu v mashinakh (Third All-Union
Conference on Friction and Wear in Machines) which was held
April 9-15, 1958. The problems discussed were in 5 main areas:

1) Hydrodynamic Theory of Lubrication and Friction Bearings
(Chairman: Yu. A. Gut' Yar, Doctor of Technical Sciences);
2) Lubrication of Technical Sciences; 3) Lubrication
and Lubricant Materials (Chairman: G. V. Vinogradov, Doctor of
Chemical Sciences); 3) Dry and Boundary Friction (Chairman:
B. V. Derzhin, Corresponding Member of the Academy of Sciences
SFSR, and I. V. Kruglyak, Doctor of Technical Sciences);
4) Wear and Wear Resistance (Chairman: N. M. Krushchov,
Doctor of Technical Sciences); and 5) Friction and Antifriction
Materials (Chairman: I. V. Kruglyak, Doctor of Technical
Sciences), and N. M. Krushchov, Doctor of Technical
Sciences). Chairman of the general assembly (on the first and
last day of the conference) was Academician A. A. Blagonravov.
Yu. P. Frunzanskiy, Candidate of Technical Sciences was scientific
secretary. The transactions of the conference were published
in 3 volumes, of which the present volume is the first.
This volume contains articles concerning the wear and
wear resistance of antifriction materials. Among the topics
covered are: modern developments in the theory and experi-
mental science of wear resistance of materials, specific data
on the wear resistance of various combinations of materials,
methods for increasing the wear resistance of certain materials,
the effects of friction and wear on the structure of materials,
the mechanics of the sealing of metals, the effect of
type of lubricating materials on sealing, abrasive wear of a
wide variety of materials and components under many different
conditions, modern developments in antifriction materials, and
the effects of finish machining on wear resistance. Many per-
sonalities are mentioned in the text. References accompany most
of the articles.

Card 7/13

Gorb, N. I. X-Ray Investigation of the Structure of Steel Prepared by Nonuniform Volumetric Compression at Normal and Elevated Temperatures	128
Akhiezer, P. M. and V. I. Starzhev. On the Stresses and Structural Transformations in Steel Due to Wear	136
Fiktor, E. P. Creeping of Metals Under Ordinary Con- ditions and the Action of Normal Loads	144
Kosetskiy, B. I., I. M. Tepets, and I. G. Kozoriz. V- secondary Structures on Friction Surfaces, and the Wear of Metals	152
Kravetskiy, I. M., I. P. Sardina, D. B. Vostobomilov, O. V. Podgornaya, and M. M. Turpitskiy. Dynamics of Structural Transformations in the Case of Wear	163

10

GORB, M. L.

3

PHASE I BOOK EXPLOITATION

SOV/5029

Grozin, Boris Dmitriyevich, David Abramovich Draygor, Vsevolod Nikolayevich Semirog-Orlik, Mikhail Apollonovich Puzanov, Matvey L'vovich Gorb, Vil'yam Fedoseyevich Yankevich, Mariya Dmitriyevna Sinyavskaya, and Georgiy Iosifovich Val'chuk

Povysheniye ekspluatatsionnoy nadezhnosti detaley mashin (Increasing the Operational Reliability of Machine Parts) Moscow, Mashgiz, 1960. 292 p. Errata slip inserted. 10,000 copies printed.

Reviewer: V. S. Kramarov, Doctor of Technical Sciences, Professor; Ed.: D. A. Draygor, Doctor of Technical Sciences; Ed.: G. D. Tynyanyy; Tech. Ed.: M. S. Gornostaypol'skaya; Chief Ed., Mashgiz (Southern Dept.): V. K. Serdyuk, Engineer.

PURPOSE: This book is intended for scientific workers and technical personnel in machine building.

COVERAGE: The authors discuss new methods of investigating the physical state of machine-part surface layers, important for determining the reliability of parts in operation. Information is

Card 1/6

Increasing the Operational Reliability (Cont.)

SOV/5029

presented on the influence of friction and wear conditions on fatigue limit and on the limited endurance of steel under the simultaneous action of friction forces and cyclic loads. Also discussed are: the effect of the impulse action of high-temperature compressed gases on the structure of the surface layers of metal, new machines for studying the wear resistance of metals under various friction conditions, and new processes for increasing the wear resistance of machine parts. The majority of investigations discussed were carried out by members of the Institut Mekhaniki AN UkrSSR (Institute of Mechanics, Academy of Sciences Ukrainian SSR). Ch. I and the Conclusion were written by B. D. Grozin, Corresponding Member, Academy of Sciences UkrSSR, and D. A. Draygor, Doctor of Technical Sciences; M. L. Gorb, Candidate of Technical Sciences, wrote Section 1 of Ch. II; V. N. Semirog-Orlik, Candidate of Technical Sciences, wrote Section 2 of Ch. II; S. B. Nizhnik and T. M. Golovinskaya, Engineers, wrote Section 3 of Ch. II; Section 4 of Ch. II was the work of V. F. Yankevich, Engineer. Ch. III, was written by B. D. Grozin, M. L. Gorb, V. N. Semirog-Orlik and V. F. Yankevich.

Card 2/6

Increasing the Operational Reliability (Cont.)

SOV/5029

M. A. Puzanov, Candidate of Technical Sciences, wrote Sections 1-4 and 7 of Ch. IV; Section 5 of Ch. IV was written by B. D. Grozin and M. D. Sinyavskaya, Engineer; Section 6 of Ch. IV was the work of D. A. Draygor, and G. I. Val'chuk, Engineer. Sections 1 and 2 of Ch. V were written by M. D. Sinyavskaya; Section 3 of Ch. V was written by V. F. Yankevich. No personalities are mentioned. References accompany each chapter. There are 185 references: 175 Soviet, 3 German, 3 French, and 4 English.

- TABLE OF CONTENTS:

Foreword	3
Ch. I. Basic Factors of Durability and Operational Reliability of Machine Parts	5
1. Formation of the surface layers of machine parts depending on the method of machining	5
2. Effect of the [structural] state of surface layers of machine parts on their operational reliability	10
Bibliography	16

Card 3/6

GROZIN, B.D., otv.red.; DRAYGOR, D.A., zam.otv.red.; BARABASH, M.L., red.toma; KRAGEL'SKIY, I.V., red.; SERENSEN, S.V., red.; PAYNERMAN, I.D., red.; ZASLAVSKIY, S.S., red. Prinimali uchastiye: BRAUN, M.P., prof.; VAINBERG, D.V., prof.; PETRENSKO, I.P., kand.tekhn.nauk; SINYAVSKAYA, M.D., inzh.; SHEVCHUK, V.A., kand.tekhn.nauk; SEMIROG-ORLIK, V.N., kand.tekhn.nauk; YANKEVICH, V.F., inzh.; GORB, M.L., kand.tekhn.nauk; RAKHLEINA, N.P., tekhn.red.

[Increasing the wear resistance and useful life of machinery in two volumes] Povyshenie iznosostoinosti i sroka sluzhby mashin v dvukh tomakh. Kiev, Izd-vo Akad.nauk USSR. Vol.1. 1960. 486 p. (MIRA 13:12)

1. Vsesoyuznoye nauchno-tehnicheskoye obshchestvo mashino-stroitel'noy promyshlennosti. Kiyevskoye oblastnoye pravleniye. (Mechanical wear)
(Mechanical engineering)

18 8200

25442

S/137/61/000/006/070/092
A005/A101

AUTHOR: Gorb, M.L.

TITLE: Roentgenostructural investigation of steel deformed by volumetric non-uniform compression at normal and elevated temperatures

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 6, 1961, 32-33, abstract 62h216 ("Tr. 3-y Vses. konferentsii po treniyu i iznosu v mashinakh, v. 1", Moscow, AN SSSR, 1960, 128 - 136)

TEXT: From the width and intensity of 110 and 220 reflexes, obtained by recording on a YP-50 N (URS-50 I) device in Fe-K_α radiation, the author determined the range of coherent dispersion and stresses of the II and III order in Y8 (U8) and ShKh15 (ShKh15) steels which were deformed by compression in rings by 0 - 30% at 20 - 600°C and tempered after cold deformation within the aforementioned temperature range. It was found that stresses of the II and III order decreased more intensively at higher deformation temperatures than at elevated tempering temperatures. It is shown that the range of coherent dispersion increases with higher tempering temperatures, although plastic deformation suppresses strongly this process. The values of stresses of II and III order revealed,

Card 1/2

Roentgenostructural investigation ...

25442 8/137/61/000/006/070/092
A006/A101

✓

are compared with characteristics of deformation resistance of the steels investigated; a linear correlation of the mentioned stresses σ_1 with stresses of II order is detected. There are 9 references.

A. Babareko

[Abstracter's note: Complete translation]

Card 2/2

41358

S/081/62/000/017/089/102
B177/B186

15.8080

AUTHORS: Gorb, M. L., Sinyavskaya, M. D.

TITLE: Comparative tests for wear on polyamide resins subject to
sliding friction against steelPERIODICAL: Referativnyy zhurnal. Khimiya, no. 17, 1962, 545, abstract
17P83 (In collection: Plastmassy v mashinostr. i priborostr.
Kiyev, Gostekhizdat USSR, 1961, 294 - 302)TEXT: To fix the limiting values of velocity and pressure at which
polyamides can be used as construction materials in friction assemblies,
research was conducted into the amount and intensity of relative wear
suffered by specimens of the polyamides N68 (P68), and AK-7 (AK-7) (pure
and containing fillers), and also of cord caprone at temperatures not
higher than 150°, as a function of the velocity (0.4; 1.0; 2.0; 3.0; 4.0
and 5.0 m/sec) and pressure (10 - 150 kg/cm²), under sliding friction
against steel both with and without lubricants. A simultaneously increase
of velocity and pressure in dry sliding friction was found to increase the

"Card 1/2" X

S/081/62/000/017/089/102

B177/B186

Comparative tests for wear on ...

intensity of wear. It is of advantage to introduce up to 10% of anti-friction fillers into polyamide materials, as this reduces the coefficient of friction and the temperature to which the friction surfaces are heated. Large quantities of filler increase the wear, and at certain values of pressure and velocity they either sharply increase the intensity of wear or they lead to breakdown. Introducing lubricant onto the friction surface without cooling (drip lubrication with MC (MS) oil) reduces the quantity and intensity of wear, and also increases the limiting values of its parameters. Abundant lubrication enhances this effect. [Abstracter's note: Complete translation.]

Card 2/2

43769

158500

S/653/61/000/000/025/051
I007/I207

AUTHORS: Gorb, M.L. and Sinyavskaya, M.D.

TITLE: Comparative tests of wear in sliding friction between polyamide resins and steel

SOURCE: Plastmassy v mashinostroyenii i priborostroyenii. Pervaya resp. nauch.-tekh. konfer. po vopr. prim. plastmass v mashinostr. i priborostr., Kiev, 1959. Kiev, Gostekhizdat, 1961, 294-302.

TEXT: This is a report on investigations carried out to study the suitable use of plastics (in particular polyamides) as structural components in friction assemblies. Particular attention was paid to the problem of intensity and amount of wear as a function of velocity and pressure during friction on steel with and without lubrication, and tests were conducted to establish the maximum values

Card 1/2

S/653/61/000/000/025/051
I007/I207

Comparative tests of wear in ...

of velocity and pressure for the case of any friction. Test stand and methods are amply described and illustrated. The specimens were tested on compression at varying temperatures, and on wear resistance with and without lubrication. As was found, simultaneous increase in velocity and pressure on sliding dry-friction are liable to increase wear. The addition of a certain amount (maximum 10%) of antifriction fillers to the plastics is suitable as it reduces the friction coefficient and the temperature in the friction assembly. The use of drip lubrication (without) cooling markedly reduces intensity and amount of wear. There are 7 figures.

Card 2/2

ACCESSION NR: APL046154

S/0198/64/010/005/0547/0551

AUTHOR: Gorb, M. L. (Kiev)

TITLE: On the method of testing metals at high pressure and high temperature

SOURCE: *Prykladna mehanika*, v. 10, no. 5, 1964, 547-551

TOPIC TAGS: metal testing, high pressure, high temperature, pressure chamber, temperature measurement

ABSTRACT: The construction of a new variant of a conical, cylindrical, high-pressure chamber is described. The weakest part, a cylindrical plunger, is supported in the chamber by the chamber itself, without any additional rings. A method based on the principle of a natural thermocouple is proposed for measuring the temperature in the high-pressure chamber. Orig. art. has: 3 figures and 1 graph.

ASSOCIATION: *Instytut mehaniki AN URSR* (Mechanics Institute, AN URSR)

SUBMITTED: 20Nov63

NO REF SOV: 004

ENCL: 00

SUB CODE: MM
Card 1/1

OTHER: 006

VAL'CHUK, G.I. [Val'chuk, H.I.]; GORB, M.L. [Gorb, M.L.]; MACHUGOVSKIY,
B.M. [Machuhovs'kiy, B.M.]

Self-hardening plastics as substitute for antifriction metal
compounds in the manufacture of food machinery. Khar. prom.
no.3:40-45 JI-2 '65. (MIRA 18:9)

PELEPELIN, V.M. (Kiyev); GORB, M.L. (Kiyev)

Experimental investigation of deformations of system of rings
in testing specimens under three-dimensional uneven pressure
conditions. Prikl. mekh. 1 no.11:81-88 '65.

(MIRA 19:1)

l. Institut mekhaniki AN UkrSSR. Submitted April 22, 1965.

L 13827-66 EWT(d)/EWT(m)/EWP(w)/EWP(v)/T-2/EWP(t)/EWP(k)/EWP(h)/EWP(b)/EWP(l)/
 ACC NR: AP6001246 ETC(n) JD/WW/HW/EM SOURCE CODE: UR/0198/65/001/011/0081/0088

AUTHORS: Pelepalin, V. M. (Kiev); Gorb, M. L. (Kiev)

ORG: Institute of Mechanics, AN UkrSSR (Institut mehaniki, AN UkrSSR)

TITLE: Experimental investigation of deformations in a system of bands in testing
 systems of specimens in conditions of global nonuniform compression

SOURCE: Prikladnaya mehanika, v. 1, no. 11, 1965, 81-88

TOPIC TAGS: stress measurement, stress analysis, strain measurement, stretching,
 plastic deformation, aerospace structure

ABSTRACT: Experiments were performed for the evaluation of the stressed and de-
 formed state of bracing band systems in global nonuniform compression tests. In-
 ternal pressures required for plastic deformation of a ring are computed as

$$P_b = \frac{2\sigma_0}{\sqrt{3}} \sin\left(\frac{\pi}{6} - \theta_b\right).$$

This formula is used by A. Nadai (Plastichnost' i razrusheniye tverdikh tel, IL,
 1954). Here, θ_b characterizes the deformed state of the external ring during the
 loading process, and σ_0 is the stress corresponding to the applied degree of
 deformation of the ring material. Axial deformation ε is related to θ_b and to

Card 1/3

ACC NR: AP6001246

the ratio of the external and internal radii (d / b) according to the formulae

$$\epsilon = \frac{\left(\frac{d_0}{b_0}\right)^2 + \frac{2}{\sqrt{3}} \cos \theta_0 \exp \sqrt{3} \left(\frac{\pi}{6} - \theta_0\right)}{\left(\frac{d_0}{b_0}\right)^2 - 1}$$

$$\frac{d}{b} = \sqrt{(1 - \epsilon) \left(\frac{d_0}{b_0}\right)^2 + \epsilon}$$

where b_0 and d_0 are the internal and external radii of the undeformed ring. Experimental tests were performed to verify the latter two formulae. Figure 1 shows

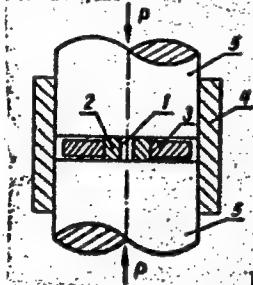


Fig. 1.

Card 2/3

L 13827-66

ACC NR: AP6001246

the experimental set-up. The specimen 1 is set in the ring systems 2 and 3. The test is conducted in chamber 4 which channels simultaneously the compression punches 5. Deformation is constrained, so that it is possible to determine the relationship of axial deformation of the specimen and radial deformation of points of the external lower surface of the internal ring. Measurement parameters and experimental control are described. Radial deformation of points of the compression surfaces of the rings was found to be

$$\epsilon_r = \frac{1}{\sqrt{1-e}} - 1;$$

and radial deformation of the inner ring along its external diameter is

$$\epsilon_d = \sqrt{1 + \left(\frac{e}{1-e}\right) \left(\frac{b_0}{d_0}\right)^2} - 1.$$

Additional deformation relationships are plotted. Test results were found to be in fair agreement with published reports. Orig. art. has: 6 figures and 5 equations.

SUB CODE: 20, 13/ SUBM DATE: 22Apr65/ ORIG REF: 003/ OTH REF: 001

JC
Card 3/3

GORB, M.L. (Kiyev); PELEPELIN, V.M. (Kiyev); CHERNYAK, N.I. (Kiyev)

Determining the radial pressure of a specimen under conditions
of a nonuniform volumetric pressure. Prikl. mekh. 1 no.10;
87-92 '65. (MIRA 18:12)

1. Institut mekhaniki AN UkrSSR. Submitted March 29, 1965.

5020-0 / EWP(W)/EWP(t)/ETI LIP(c) JD/DJ

ACC NR: AP6027489 (A) SOURCE CODE: UR/0418/66/000/003/0063/0066

AUTHOR: Bezruchko, I. V. (Engineer); Golovinskaya, T. M. (Engineer); Gorb, M. L. (Engineer); Panchenko, N. P. (Engineer); Chernenko, V. S. (Engineer); Chernyak, N. I. (Engineer)

ORG: None

TITLE: Contact fatigue strength of ShKh15 bearing steel

SOURCE: Tekhnologiya i organizatsiya proizvodstva, no. 3, 1966, 63-66

TOPIC TAGS: fatigue test, fatigue strength, steel microstructure, x-ray analysis, BEARING STEEL / ShKh15 BEARING STEEL

ABSTRACT: The authors describe a study carried out at the Institute of Mechanics AN UkrSSR in cooperation with the First State Bearing Plant on the contact fatigue strength of ShKh15 bearing steel. The basic criterion in evaluating polishing conditions is taken as the physical state of the layer structure and depth of structural variation. Mechanical methods for testing contact fatigue strength and for measuring microhardness were used together with metallophysical methods and microstructural and x-ray structural analysis. Steel specimens used for these tests were heat treated after finish machining. The following heat treatment procedures were used: quenching at 850°C in 40-50°C oil, cold processing with cooling to -30°C and tempering at 150-160°C. These conditions give specimens with a hardness of HRC 62-64. After heat treatment the specimens were polished under various conditions. The specimens were divided into three groups according to the amount of metal removed: 0.1 mm for the first group; 0.15 mm for the second and 0.25 mm for the third. Depth of structural variation

49
48
G

Card 1/2 UDC: 620.17:669.14

L 00309-07

ACC NR: AP6027489

variation after polishing for the various groups is the following: 10-30 μ for the first group, 150-170 μ for the second and 220-250 μ for the third. Microstructural analysis for the first group shows that structural variation is not significant. The microhardness of these specimens is 950-1000 kg/mm². X-ray analysis for this group of specimens shows that variations due to polishing and honing are localized in a layer 10-30 μ thick. Slight deformation and elongation of the crystal lattice of the α -phase is observed in this layer. Depth of variation for the second group of specimens is 150-170 μ . This is substantiated by microhardness measurement data and microstructural and x-ray analysis. Depth of variation for the third group reaches 250 μ , these variations being similar to those of the second group. The unetched surfaces of the specimens in the first and second groups examined under an electron microscope show scaly tearing and deep scratches caused by polishing. After etching, secondary solid solutions are observed on individual surfaces oriented in the direction of polishing. A graph is given showing the contact fatigue strength of all three groups. The results show that contact fatigue limit for the second and third groups is identical (150-160 kg/mm²), differing from the first group where maximum contact strength is 200 kg/mm². Pit depth for the first group under staining does not exceed 300 μ , reaching 600-700 μ for the second and third groups. All groups show large-scale microfocal scaling after testing observed on the electron microscope. The authors recommend that polishing procedures be selected which have the minimum effect on the structural variation of the surface layer of ShKh15 steel. Orig. art. has: 4 figures.

SUB CODE: 11/ SUBM DATE: None

Card 2/2 *tdh*

L 10324-67

EWP(k)/EWP(m)/EWP(w)/EWP(t)/E11

IJP/C/ 3D

ACC NR: AP6020918

SOURCE CODE: UR/0369/66/002/002/0204/0208

AUTHORS: Bezruchko, I. V.; Golovinskaya, T. M.; Gorb, M. L.; Panichenko, N. P.; Chernenko, V. S.; Chernyak, N. I.ORG: Mechanics Institute of the AN UkrSSR, Kiev (Institut mekhaniki AN UkrSSR);
First GPZ, Moscow (Pervyy GPZ)TITLE: Effects of the physical condition of the surface layer, formed during grinding,
on the contact wear resistance of steel ShKh15

SOURCE: Fiziko-khimicheskaya mekhanika materialov, v. 2, no. 2, 1966, 204-208

TOPIC TAGS: surface fatigue, surface property, metal friction, steel property,
grinding wheel, electron microscope, steel, x-ray equipment/ ShKh15 steel, EB60SM2K
grinding wheel, E46SM2K grinding wheel, MIM-8M microscope, UEM-100 electron microscope,
UPS-50I x-ray equipmentABSTRACT: The effects of the structure and depth of structural gradients on the
surface fatigue of ShKh15 steel were investigated. Thirty-five millimeter diameter x
10-mm thick disc-shaped specimens were heat-treated and ground using wheel EB60SM2K
and finish-ground with wheel E46SM2K. Three grinding regimes (0.005 mm/rev, 0.15 mm
and 0.25 mm) were used to produce structural changes in layers of 10--20, 150--160,
and 220--250 micron respectively. After lapping to an 11--12 class finish, surface
fatigue tests were performed at 1750 rpm using methods described by M. A. Puzanov

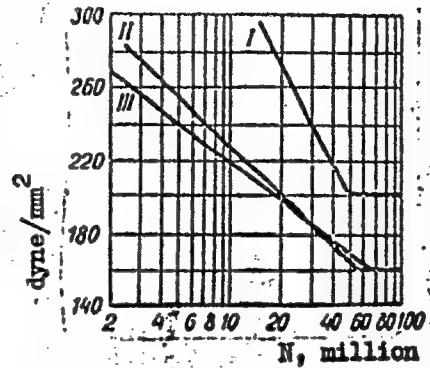
Cord 1/2

L 10520-07

ACC NR: AP6020918

(Sb. Povysheniye iznosostoykosti detaley mashin, Izd. AN UkrSSR, 1956, No. 22). Microstructural studies of the surface layers were performed using optical and electron microscopes (MIM-8M and UEM-100 respectively) and x-ray equipment (UPS-50I). A discussion of the structural changes for the different grinding regimes is included, and the experimental results are summarized in Fig. 1.

Fig. 1. Surface fatigue of group I, II, and III specimens (corresponding to structural changes in layers of 10--20, 150--160, and 220--250 micron respectively)



Orig. art. has: 5 figures.

SUB CODE: 11,13/ SUBM DATE: 17Jul65/ ORIG REF: 003

DOVGYALLO, Ye.N.: GORB, N.M.

Relation between visibility and the cloud base. Trudy GGO
no. 153:89-92 '64. (MIRA 17:9)

GOEB, T.F.; GOROKHOVATSKIY, Ya.B.

Oxidation of ethylene on silver catalysts of various grammation.
Trudy KTIPI no.17:173-177 '57.
(MIRA 13:1)
(Silver) (Ethylene)

GORB, T.F.; POLYACHENKO, M.M.; PRIKHOD'KO, I.A.; LUGOVAYA, L.N.

Investigation of the suitability of Ukrainian kieselguhrs to
the needs of the sugar industry. Trudy KTIIP no.21:23-39 '59.
(MIRA 14:1)

(Kieselguhr)

(Sugar manufacture)

80662

S/153/60/003/02/10/034
B011/B003

5,3200

AUTHOR: Gorb, T. F.

TITLE: Investigation of the Part Played by Macrokinetic Factors by Measuring the Catalyst Temperature

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1960, Vol. 3, No. 2, pp. 272-275

TEXT: The author studied the oxidation of ethylene on a silver catalyst. The important heating of the catalyst surface occurring in the extreme diffusion region served to clarify the influence exerted by macrofactors on the course of the catalytic process. As shown in Fig. 1 the investigation was made in a continuously working apparatus. A tablet of active silver pressed under a pressure of 300 atm was used as a catalyst. Openings for thermocouples were bored into the tablet (Figs. 2,3). A 5%-ethylene-air mixture passed through at a rate of 32 cm³/min was employed for the investigation. A silver tablet with a diameter of 10 mm

Card 1/3

✓

80662

Investigation of the Part Played by
Macrokinetic Factors by Measuring the
Catalyst Temperature

S/153/60/003/02/10/034
B011/B003

with one hole and another with a diameter of 13 mm and three holes were used. The temperature distribution in the tablet of the catalyst is represented in Table 2. The experimental results obtained by a tablet with a diameter of 13 mm pressed under high pressure showed that the diffusion inhibition occurs earlier and more strongly than in smaller catalyst granules pressed at lower pressure (Ref. 1). The author determined that the temperature in the total mass of the tablet is equal in the 13-mm tablet between 230 and 290°, but much higher than the temperature of the passing gas. This is indicative of the fact that oxidation takes place close to the extreme diffusion region. Furthermore, the author stated that the thermocouple which touches the catalyst surface with its soldered joint does not show its true temperature in exothermic catalytic reactions in the diffusion region but rather the temperature mean between the surface temperature of the catalyst and the passing gas. There are 3 figures, 2 tables, and 1 Soviet reference.

Card 2/3

80662

Investigation of the Part Played by
Macrokinetic Factors by Measuring the
Catalyst Temperature

S/153/60/003/02/10/034
B011/B003

ASSOCIATION: Institut fizicheskoy khimii AN UkrSSR (Institute of
Physical Chemistry of the Academy of Sciences of the
UkrSSR). Kiyevskiy tekhnologicheskiy institut pishchevoy
promyshlennosti (Kiyev Technological Institute of Food
Industry). Kafedra obshchey i neorganicheskoy khimii
(Chair of General and Inorganic Chemistry)

SUBMITTED: March 31, 1958

✓

Card 3/3

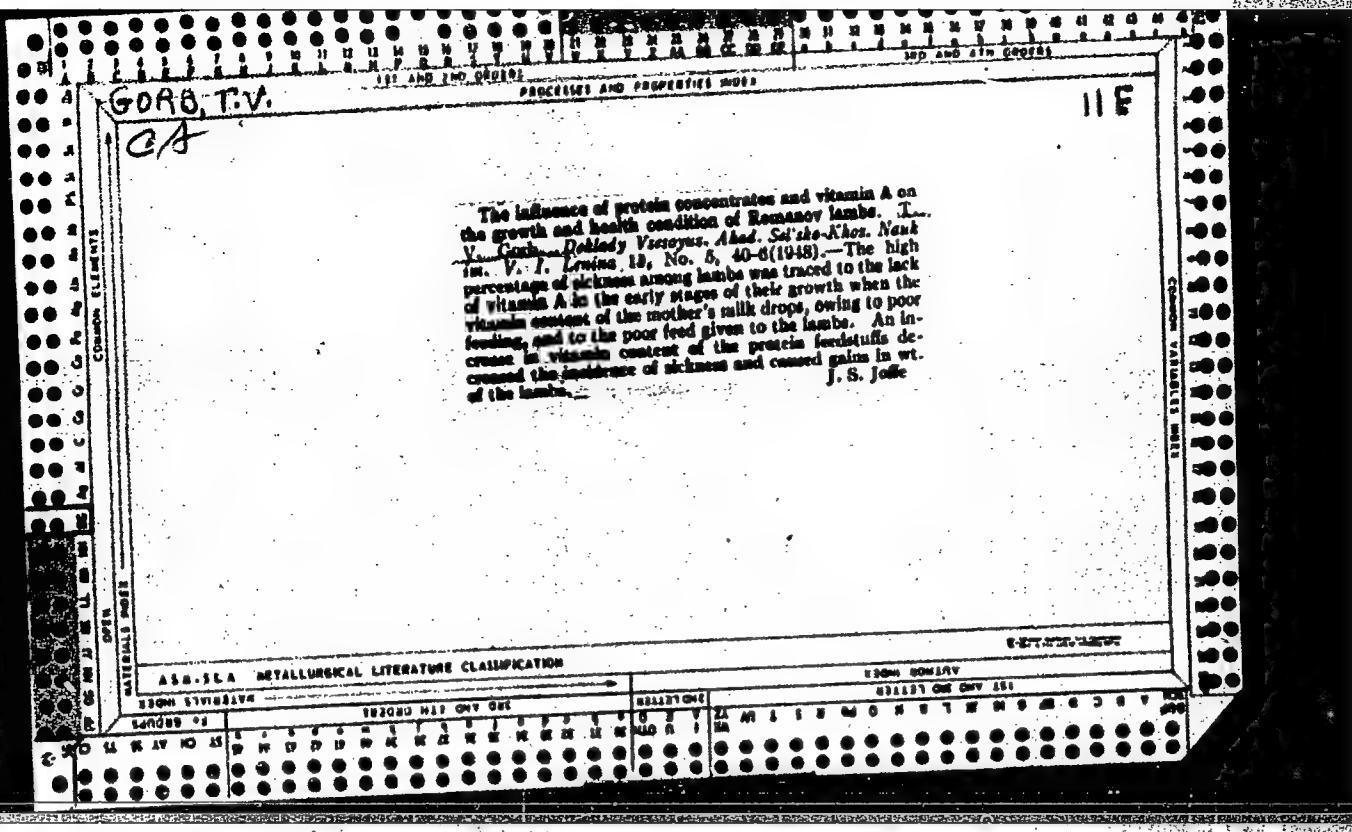
GORB, T.F.; USKOVA, Ye.T.

Some physicochemical properties of kieselguhr from the
Kirovograd deposit. Trudy KTIPP no.25:98-101 '62.
(MIRA 16:5)
(Kirovograd Province—Diatomaceous earth)

GORB, T. F.; POLYACHENKO, M. M.; USKOVA, Ye. T.; ARTEMENKO, M. V.

Changes in some physicochemical properties of syrup occurring
during filtration through kieselguhr. Izv.vys.ucheb.zav.;
pishch.tekh. no. 2:60-61 '64. (MIRA 17:5)

1. Kiyevskiy tekhnologicheskiy institut pishchevoy promyshlen-
nosti, kafedra obshchey i neorganicheskoy khimii.



GORB, T. V., PROF

USSR/Medicine - Sheep
Medicine - Vitamin A

Jan 1960

"The Significance of Vitamin A and Vitamin Therapy in Sheep Breeding," Prof T. V. Gorb, Dr of Agr Sci; Z. P. Semenchenko, Aspirant, All-Union Inst Animal Husbandry,

5 pp

Vol 25

"Veter" No 1, p. 29

Tests to establish effect of vitamins on sheep obtained following results: lack of vitamin A in feed will lower productivity of sheep; lack of this vitamin has adverse effects on organic function of sheep; lambs, observed to have become sick as a result of eating feed off ground, were cured by addition of vitamin A to this feed.

61T60

GORB, T.V., professor.

Effect of vegetable protein concentrates on the milk productivity
of sheep. Sbor. trud. Khar' .vet. inst. 20:77-82 '49. (MLRA 9:11)
(Proteins) (Sheep--Physiology) (Lactation)

1. GORE, T. V., Prof.: PLYUSHCH, M. G.: RCS', I. F.
2. USSR (600)
4. Vitamins
7. Influence of vitamins A, D, and C on the growth and state of health of sucking pigs. Sov. zootekh. 7 no. 12, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

GORB. T. V., Prof.; GRISHPAK, V. F.

Ukraine - Karakul Sheep

Feeding and maintenance of karakul ewes in the Ukraine. Kar. i zver. 6, No. 1, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

GORB, T.V., professor, doktor sel'skokhospaystvennykh nauk.

Prevention and treatment of vitamin A deficiency in pregnant ewes.
Sbor. trud. Khar'. vet. inst. 22:337-344. '54. (MLRA 9:12)

1. Kafedra kormleniya sel'skokhospaystvennykh zhivotnykh Khar'kovskogo
veterinarnogo instituta.
(Deficiency diseases) (Sheep—Diseases) (Vitamins—A)

GORB, T.V., professor; PLYUSHCH, N.G., docent; SARZHINSKIY, N.V., kandidat
veterinarnykh nauk.

Effect of various corn rations on the bacon and lard production of swine. Veterinaria 32 no.10:74-76 0 '55. (MIRA 8:12)

1. Khar'kovskiy veterinarnyy institut.
(CORN (MAIZE) (SWINE--FEEDING AND FEEDING STUFFS))

USSR/Farm Animals: Swine

Q-3

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 35701

Author : Gorb T.V. Belousov B.M.

Inst : Not Given

Title : The Influence of Cobalt on the Growth of Young Pigs (Vliyanie kobalt'a na rast porosyot)

Orig Pub : Sots. tverinnitstvo, 1957, No 4, 57

Abstract : Three experiments were carried out - in the fall, spring and beginning of summer. In two experiments, all young pigs were given 25 mg. of iron sulfate and 10 mg. of copper sulfate a day. In addition to this, the experimental group was receiving 3 mg. of cobalt sulfate a day (0.5 mg. per 1 kg. of live weight). In the third experiment, the control group was not given trace elements, and the experimental group was receiving cobalt sulfate. In all experiments, the young pigs were administered trace elements from the 10th day to 2 months. All pigs receiving cobalt sulfate had a higher weaning weight by 9.7, 22.1, and 16.1%, as compared with the

Card : 1/2

USSR/Farm Animals. Swine

Q-3

Abz Jour & Ref Zhur - Biol., No 8, 1958, No 35701

1958/08/01/1958/08/01 - 35701

the pigs of the control group. The difference in weight was most noticeable in the second half of the experiment. In experimental pigs, in the first two experiments, a somewhat higher content of Hb in the blood was observed.

1958/08/01/1958/08/01 - 35701

1958/08/01/1958/08/01 - 35701

During the functioning of pigs in the first two experiments, the weight of the animal (in kilograms) was measured. The following data were obtained: weight of 35701, 200, 210, 220, 230, 240, 250, 260, 270, 280, 290, 300, 310, 320, 330, 340, 350, 360, 370, 380, 390, 400, 410, 420, 430, 440, 450, 460, 470, 480, 490, 500, 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640, 650, 660, 670, 680, 690, 700, 710, 720, 730, 740, 750, 760, 770, 780, 790, 800, 810, 820, 830, 840, 850, 860, 870, 880, 890, 900, 910, 920, 930, 940, 950, 960, 970, 980, 990, 1000, 1010, 1020, 1030, 1040, 1050, 1060, 1070, 1080, 1090, 1100, 1110, 1120, 1130, 1140, 1150, 1160, 1170, 1180, 1190, 1200, 1210, 1220, 1230, 1240, 1250, 1260, 1270, 1280, 1290, 1300, 1310, 1320, 1330, 1340, 1350, 1360, 1370, 1380, 1390, 1400, 1410, 1420, 1430, 1440, 1450, 1460, 1470, 1480, 1490, 1500, 1510, 1520, 1530, 1540, 1550, 1560, 1570, 1580, 1590, 1600, 1610, 1620, 1630, 1640, 1650, 1660, 1670, 1680, 1690, 1700, 1710, 1720, 1730, 1740, 1750, 1760, 1770, 1780, 1790, 1800, 1810, 1820, 1830, 1840, 1850, 1860, 1870, 1880, 1890, 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1980, 1990, 2000, 2010, 2020, 2030, 2040, 2050, 2060, 2070, 2080, 2090, 2100, 2110, 2120, 2130, 2140, 2150, 2160, 2170, 2180, 2190, 2200, 2210, 2220, 2230, 2240, 2250, 2260, 2270, 2280, 2290, 2300, 2310, 2320, 2330, 2340, 2350, 2360, 2370, 2380, 2390, 2400, 2410, 2420, 2430, 2440, 2450, 2460, 2470, 2480, 2490, 2500, 2510, 2520, 2530, 2540, 2550, 2560, 2570, 2580, 2590, 2600, 2610, 2620, 2630, 2640, 2650, 2660, 2670, 2680, 2690, 2700, 2710, 2720, 2730, 2740, 2750, 2760, 2770, 2780, 2790, 2800, 2810, 2820, 2830, 2840, 2850, 2860, 2870, 2880, 2890, 2900, 2910, 2920, 2930, 2940, 2950, 2960, 2970, 2980, 2990, 3000, 3010, 3020, 3030, 3040, 3050, 3060, 3070, 3080, 3090, 3100, 3110, 3120, 3130, 3140, 3150, 3160, 3170, 3180, 3190, 3200, 3210, 3220, 3230, 3240, 3250, 3260, 3270, 3280, 3290, 3300, 3310, 3320, 3330, 3340, 3350, 3360, 3370, 3380, 3390, 3400, 3410, 3420, 3430, 3440, 3450, 3460, 3470, 3480, 3490, 3500, 3510, 3520, 3530, 3540, 3550, 3560, 3570, 3580, 3590, 3600, 3610, 3620, 3630, 3640, 3650, 3660, 3670, 3680, 3690, 3700, 3710, 3720, 3730, 3740, 3750, 3760, 3770, 3780, 3790, 3800, 3810, 3820, 3830, 3840, 3850, 3860, 3870, 3880, 3890, 3900, 3910, 3920, 3930, 3940, 3950, 3960, 3970, 3980, 3990, 4000, 4010, 4020, 4030, 4040, 4050, 4060, 4070, 4080, 4090, 4100, 4110, 4120, 4130, 4140, 4150, 4160, 4170, 4180, 4190, 4200, 4210, 4220, 4230, 4240, 4250, 4260, 4270, 4280, 4290, 4300, 4310, 4320, 4330, 4340, 4350, 4360, 4370, 4380, 4390, 4400, 4410, 4420, 4430, 4440, 4450, 4460, 4470, 4480, 4490, 4500, 4510, 4520, 4530, 4540, 4550, 4560, 4570, 4580, 4590, 4600, 4610, 4620, 4630, 4640, 4650, 4660, 4670, 4680, 4690, 4700, 4710, 4720, 4730, 4740, 4750, 4760, 4770, 4780, 4790, 4800, 4810, 4820, 4830, 4840, 4850, 4860, 4870, 4880, 4890, 4900, 4910, 4920, 4930, 4940, 4950, 4960, 4970, 4980, 4990, 5000, 5010, 5020, 5030, 5040, 5050, 5060, 5070, 5080, 5090, 5090, 5100, 5110, 5120, 5130, 5140, 5150, 5160, 5170, 5180, 5190, 5200, 5210, 5220, 5230, 5240, 5250, 5260, 5270, 5280, 5290, 5290, 5300, 5310, 5320, 5330, 5340, 5350, 5360, 5370, 5380, 5390, 5390, 5400, 5410, 5420, 5430, 5440, 5450, 5460, 5470, 5480, 5490, 5490, 5500, 5510, 5520, 5530, 5540, 5550, 5560, 5570, 5580, 5590, 5590, 5600, 5610, 5620, 5630, 5640, 5650, 5660, 5670, 5680, 5690, 5690, 5700, 5710, 5720, 5730, 5740, 5750, 5760, 5770, 5780, 5790, 5790, 5800, 5810, 5820, 5830, 5840, 5850, 5860, 5870, 5880, 5890, 5890, 5900, 5910, 5920, 5930, 5940, 5950, 5960, 5970, 5980, 5990, 5990, 6000, 6010, 6020, 6030, 6040, 6050, 6060, 6070, 6080, 6090, 6090, 6100, 6110, 6120, 6130, 6140, 6150, 6160, 6170, 6180, 6190, 6190, 6200, 6210, 6220, 6230, 6240, 6250, 6260, 6270, 6280, 6290, 6290, 6300, 6310, 6320, 6330, 6340, 6350, 6360, 6370, 6380, 6390, 6390, 6400, 6410, 6420, 6430, 6440, 6450, 6460, 6470, 6480, 6490, 6490, 6500, 6510, 6520, 6530, 6540, 6550, 6560, 6570, 6580, 6590, 6590, 6600, 6610, 6620, 6630, 6640, 6650, 6660, 6670, 6680, 6690, 6690, 6700, 6710, 6720, 6730, 6740, 6750, 6760, 6770, 6780, 6790, 6790, 6800, 6810, 6820, 6830, 6840, 6850, 6860, 6870, 6880, 6890, 6890, 6900, 6910, 6920, 6930, 6940, 6950, 6960, 6970, 6980, 6990, 6990, 7000, 7010, 7020, 7030, 7040, 7050, 7060, 7070, 7080, 7090, 7090, 7100, 7110, 7120, 7130, 7140, 7150, 7160, 7170, 7180, 7190, 7190, 7200, 7210, 7220, 7230, 7240, 7250, 7260, 7270, 7280, 7290, 7290, 7300, 7310, 7320, 7330, 7340, 7350, 7360, 7370, 7380, 7390, 7390, 7400, 7410, 7420, 7430, 7440, 7450, 7460, 7470, 7480, 7490, 7490, 7500, 7510, 7520, 7530, 7540, 7550, 7560, 7570, 7580, 7590, 7590, 7600, 7610, 7620, 7630, 7640, 7650, 7660, 7670, 7680, 7690, 7690, 7700, 7710, 7720, 7730, 7740, 7750, 7760, 7770, 7780, 7790, 7790, 7800, 7810, 7820, 7830, 7840, 7850, 7860, 7870, 7880, 7890, 7890, 7900, 7910, 7920, 7930, 7940, 7950, 7960, 7970, 7980, 7990, 7990, 8000, 8010, 8020, 8030, 8040, 8050, 8060, 8070, 8080, 8090, 8090, 8100, 8110, 8120, 8130, 8140, 8150, 8160, 8170, 8180, 8190, 8190, 8200, 8210, 8220, 8230, 8240, 8250, 8260, 8270, 8280, 8290, 8290, 8300, 8310, 8320, 8330, 8340, 8350, 8360, 8370, 8380, 8390, 8390, 8400, 8410, 8420, 8430, 8440, 8450, 8460, 8470, 8480, 8490, 8490, 8500, 8510, 8520, 8530, 8540, 8550, 8560, 8570, 8580, 8590, 8590, 8600, 8610, 8620, 8630, 8640, 8650, 8660, 8670, 8680, 8690, 8690, 8700, 8710, 8720, 8730, 8740, 8750, 8760, 8770, 8780, 8790, 8790, 8800, 8810, 8820, 8830, 8840, 8850, 8860, 8870, 8880, 8890, 8890, 8900, 8910, 8920, 8930, 8940, 8950, 8960, 8970, 8980, 8990, 8990, 9000, 9010, 9020, 9030, 9040, 9050, 9060, 9070, 9080, 9090, 9090, 9100, 9110, 9120, 9130, 9140, 9150, 9160, 9170, 9180, 9190, 9190, 9200, 9210, 9220, 9230, 9240, 9250, 9260, 9270, 9280, 9290, 9290, 9300, 9310, 9320, 9330, 9340, 9350, 9360, 9370, 9380, 9390, 9390, 9400, 9410, 9420, 9430, 9440, 9450, 9460, 9470, 9480, 9490, 9490, 9500, 9510, 9520, 9530, 9540, 9550, 9560, 9570, 9580, 9590, 9590, 9600, 9610, 9620, 9630, 9640, 9650, 9660, 9670, 9680, 9690, 9690, 9700, 9710, 9720, 9730, 9740, 9750, 9760, 9770, 9780, 9790, 9790, 9800, 9810, 9820, 9830, 9840, 9850, 9860, 9870, 9880, 9890, 9890, 9900, 9910, 9920, 9930, 9940, 9950, 9960, 9970, 9980, 9980, 9990, 9990, 10000, 10010, 10020, 10030, 10040, 10050, 10060, 10070, 10080, 10090, 10090, 10100, 10110, 10120, 10130, 10140, 10150, 10160, 10170, 10180, 10190, 10190, 10200, 10210, 10220, 10230, 10240, 10250, 10260, 10270, 10280, 10290, 10290, 10300, 10310, 10320, 10330, 10340, 10350, 10360, 10370, 10380, 10390, 10390, 10400, 10410, 10420, 10430, 10440, 10450, 10460, 10470, 10480, 10490, 10490, 10500, 10510, 10520, 10530, 10540, 10550, 10560, 10570, 10580, 10590, 10590, 10600, 10610, 10620, 10630, 10640, 10650, 10660, 10670, 10680, 10690, 10690, 10700, 10710, 10720, 10730, 10740, 10750, 10760, 10770, 10780, 10790, 10790, 10800, 10810, 10820, 10830, 10840, 10850, 10860, 10870, 10880, 10890, 10890, 10900, 10910, 10920, 10930, 10940, 10950, 10960, 10970, 10980, 10980, 10990, 10990, 11000, 11010, 11020, 11030, 11040, 11050, 11060, 11070, 11080, 11090, 11090, 11100, 11110, 11120, 11130, 11140, 11150, 11160, 11170, 11180, 11190, 11190, 11200, 11210, 11220, 11230, 11240, 11250, 11260, 11270, 11280, 11290, 11290, 11300, 11310, 11320, 11330, 11340, 11350, 11360, 11370, 11380, 11390, 11390, 11400, 11410, 11420, 11430, 11440, 11450, 11460, 11470, 11480, 11490, 11490, 11500, 11510, 11520, 11530, 11540, 11550, 11560, 11570, 11580, 11590, 11590, 11600, 11610, 11620, 11630, 11640, 11650, 11660, 11670, 11680, 11690, 11690, 11700, 11710, 11720, 11730, 11740, 11750, 11760, 11770, 11780, 11790, 11790, 11800, 11810, 11820, 11830, 11840, 11850, 11860, 11870, 11880, 11890, 11890, 11900, 11910, 11920, 11930, 11940, 11950, 11960, 11970, 11980, 11980, 11990, 11990, 12000, 12010, 12020, 12030, 12040, 12050, 12060, 12070, 12080, 12090, 12090, 12100, 12110, 12120, 12130, 12140, 12150, 12160, 12170, 12180, 12190, 12190, 12200, 12210, 12220, 12230, 12240, 12250, 12260, 12270, 12280, 12290, 12290, 12300, 12310, 12320, 12330, 12340, 12350, 12360, 12370, 12380, 12390, 12390, 12400, 12410, 12420, 12430, 12440, 12450, 12460, 12470, 12480, 12490, 12490, 12500, 12510, 12520, 12530, 12540, 12550, 12560, 12570, 12580, 12590, 12590, 12600, 12610, 12620, 12630, 12640, 12650, 12660, 12670, 12680, 12690, 12690, 12700, 12710, 12720, 12730, 12740, 12750, 12760, 12770, 12780, 12790, 12790, 12800, 12810, 12820, 12830, 12840, 12850, 12860, 12870, 12880, 12890, 12890, 12900, 12910, 12920, 12930, 12940, 12950, 12960, 12970, 12980, 12980, 12990, 12990, 13000, 13010, 13020, 13030, 13040, 13050, 13060, 13070, 13080, 13090, 13090, 13100, 13110, 13120, 13130, 13140, 13150, 13160, 13170, 13180, 13190, 13190, 13200, 13210, 13220, 13230, 13240, 13250, 13260, 13270, 13280, 13290, 13290, 13300, 13310, 13320, 13330, 13340, 13350, 13360, 13370, 13380, 13390, 13390, 13400, 13410, 13420, 13430, 13440, 13450, 13460, 13470, 13480, 13490, 13490, 13500, 13510, 13520, 13530, 13540, 13550, 13560, 13570, 13580, 13590, 13590, 13600, 13610, 13620, 13630, 13640, 13650, 13660, 13670, 13680, 13690, 13690, 13700, 13710, 13720, 13730, 13740, 13750, 13760, 13770, 13780, 13790, 13790, 13800, 13810, 13820, 13830, 13840, 13850, 13860, 13870, 13880, 13890, 13890, 13900, 13910, 13920, 13930, 13940, 13950, 13960, 13970, 13980, 13980, 13990, 13990, 14000, 14010, 14020, 14030, 14040, 14050, 14060, 14070, 14080, 14090, 14090, 14100, 14110, 14120, 14130, 14140, 14150, 14160, 14170, 14180, 14190, 14190, 14200, 14210, 14220, 14230, 14240, 14250, 14260, 14270, 14280, 14290, 14290, 14300, 14310, 14320, 14330, 14340, 14350, 14360, 14370, 14380, 14380, 14390, 14390, 14400, 14410, 14420, 14430, 14440, 14450, 14460, 14470, 14480, 14490, 14490, 14500, 14510, 14520, 14530, 14540, 14550, 14560, 14570, 14580, 14590, 14590, 14600, 14610, 14620, 14630, 14640, 14650, 14660, 14670, 14680, 14690, 14690, 14700, 14710, 14720, 14730, 14740, 14750, 14760, 14770, 14780, 14790, 14790, 14800, 14810, 14820, 14830, 14840, 14850, 14860, 14870, 14880, 14890, 14890, 14900, 14910, 14920, 14930, 14940, 14950, 14960, 14970, 14980, 14980, 14990, 14990, 15000, 15010, 15020, 15030, 15040, 15050, 15060, 15070, 15080, 15090, 15090, 15100, 15110, 15120, 15130, 15140, 15150, 15160, 15170, 15180, 15190, 15190, 15200, 15210, 15220, 15230, 15240, 15250, 15260, 15270, 15280, 15290, 15290, 15300, 15310, 15320, 15330, 15340, 15350, 15360, 15370, 15380, 15380, 15390, 15390, 15400, 15410, 15420, 15430, 15440, 15450, 15460, 15470, 15480, 15490, 15490, 15500, 15510, 15520, 15530, 15540, 15550, 15560, 15570, 15580, 15590, 15590, 15600, 15610, 15620, 15630, 15640, 15650, 15660, 15670, 15680, 15690, 15690, 15700, 15710, 15720, 15730, 15740, 15750, 15760, 15770, 15780, 15790, 15790, 15800, 15810, 15820, 15830, 15840, 15850, 15860, 15870, 15880, 15890, 15890, 15900, 15910, 15920, 15930, 15940, 15950, 15960, 15970, 15980, 15980, 15990, 15990, 16000, 16010, 16020, 16030, 16040, 1605

USSR/Farm Animals - General Problems.

Q-1

Abs Jour : Ref Zhur - Biol., No 13, 1953, 33265

Author : Gorb, T.V., Klitsenko, S.T.

Inst :

Title : ~~Nutritional Values of Various Kinds of Corn and of Their Hybrids.~~

Orig Pub : Kukuruza, 1957, No 9, 43-45

Abstract : At the Khar'kov Zootechnical Institute, the chemical composition and nutritional values of various kinds of corn were investigated. It was established that corn hybrids contain 55 percent more proteins, 72 percent more fats, and almost 1½ times more ashes than Khar'kov white toothlike corn. As compared with the latter, the former possesses a 33 percent higher crop capacity and 49 percent more feed units.

Card 1/1

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000516020014-2

CATEGORY : Cultivated Plants - Forage Crops

M

ABS. JOUR. : RZhBiol., No. 14, 1953, No. 63464

AUTHOR : Gorb, T. V., Viitsenko, S. T.

INST. : Kharkov Zootechnical Institute

TITLE : Yields, Chemical Composition and Food Value of the Kernels and Cobs of Different Varieties of Corn.

ORIG. PUB. : Sb. tr. Khar'kovsk. in-t, 1957, 9, 51-63

ABSTRACT : According to the data for 1956, the first place in regard to the yield (of ears) was taken by Partizanka variety (100.7 c/ha), the second by hybrid VIR-42 (92.20 c), then - Khar'kovskaya 23 (77.10 c) and Khar'kovskaya belaya zubovidnaya (73.90 c/ha). The greatest amount of dry matter (6027 kg/ha) was secured from the crop of hybrid corn VIR-42. Hybrid corn also took the first place in the content of digestible protein and amount of food units. --Ye. A. Okorokova

Card: 1/1

GORB, T.V., doktor sel'skokhoz.nauk; MAKSAKOV, V.Ya.

Effective compounds for breaking down oxalic acid in the ensilage of sugar beet tops. Dokl.Akad.sel'khoz.24 no.10:15-18 '59. (MIRA 13:2)

1. Khar'kovskiy zootehnicheskiy institut. Predstavlena akademikom N.D.Potemkinym.
(Oxalic acid) (Ensilage) (Sugar beets)

GORB, T.V. [Horb, T.V.], doktor sel'skokhoz.nauk; TERESHCHENKO, F.K., kand.biolog.nauk; BOGAYEVSKIY, O.T. [Bohaiev's'kyi, O.T.], kand.veterin.nauk; POTYOMKIN, M.D. [Pot'omkin, M.D.], akademik; KNIGA, M. I. [Knyha, M. I.]; POPOV, O.Ya., kand.sel'skokhoz.nauk; KHMELIK, G.G. [Hmelyk, H.H.], kand.sel'skokhoz.nauk; SHRAM, I.P., kand.sel'skokhoz.nauk [deceased]; KOPIL, A.M., kand.sel'skokhoz.nauk; TSYMLYUTIN, V.K., kand.sel'skokhoz.nauk; BOZHKO, P.Yu., doktor sel'skokhoz.nauk; KROMIN, S.S., kand.sel'skokhoz.nauk; ZEMLYANSKIY, V.M. [Zemlians'kyi, V.M.], kand.sel'skokhoz.nauk; BORISENKO, A.M. [Borysenko, A.M.], kand.biolog.nauk; ZAHARENKO, V.B., kand.biolog.nauk; SMIRNOV, I.V. [Smirnov, I.V.], kand.biolog.nauk; KHRABUSTOVSKIY, I.P. [Khramustova'kyi, I.P.], kand.biolog.nauk; TORSTYANETS'KAYA, M.N. [Trostianets'ka, M.N.], assistant; ALESHEKO, P.I., inzh.; VASIL'YEV, Vasyl'Yev, O.P., kand.tehn.nauk; BUGAIENKO, I.I. [Buhaienko, I.I.], starshiy prepodavatel'; TRAKHTOMIROVA, O.O., kand.ekonom.nauk; BUTKO, S.D., kand.ekonom.nauk; TLESHIK, K.G. [Teleshik, K.H.], doktor ekonom.nauk; YAROSHENKO, V.D., kand.ekonom.nauk; LISIY, I.Y. [Lisyi, I.I.], red.; YAROSHENKO, T.G. [Yaroshenko, T.H.], tekhn.red.

[Handbook for zootechnicians] Dovidnyk zootekhnika. 2., dopovnene i pereroblene vyd. Kyiv, Dersh.vyd-vo sil's'kohospodars'koi lit-ry URSR, 1960. 728 p. (MIRA 15:2)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I. Lenina (for Potemkin). 2. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Kniga). (Stock and stock breeding)

GORB, T.F.

Investigating the role of macrokinetic factors by measuring
the temperature of the catalyst. Izv.vys.ucheb.zav.,khim. i
khim.tekh. 3 no.2:272-275 '60. (MIRA 14:6)

1. Institut fizicheskoy khimii AN USSR i Kiyevskiy tekhnologicheskiy
institut pishchevoy promyshlennosti, kafedra obshchey i neorgan-
icheskoy khimii.

(Catalysis)

GORB, T.V.; MAKSAKOV, V.Ya.

Effect of oxalate-rich rations on the mineral metabolism and some physiological indices in ruminants. Nauch. dokl. vys. shkoly; biol. nauki no.4: 53-58 '61. (MIRA 14:11)

1; Rekomendovana kafedroy kormleniya sel'skokhozyaystvennykh zhivotnykh Khar'kovskogo zootehnicheskogo instituta.
(OXALIC ACID-PHYSIOLOGICAL EFFECT)
(MINERAL METABOLISM) (CATTLE-PHYSIOLOGY)

GORB, T. V. (Doctor of Agricultural Sciences) and MAKSAKOV, V. Ya. (Candidate of Agricultural Sciences, Khar'kov Zooterinary Institute).

"Effect of sugar beet tops upon the animal organism..."
Veterinariya, vol. 39, no. 2, February 1962 pp. 66

USSR/Meadow Cultivation.

L

Abs Jour: Ref Zhur-Biol., No 9, 1958, 39133.

Author : Gorb. V. D.

Inst : Scientific Research Institute of Agriculture and
Animal Husbandry of Western Rayons of UkrSSR.

Title : Views on the Introduction Into Cultivation of
Wild-Growing Perennial Feed Grasses in the L'vov
Oblast.

Orig Pub: Inform. byul. Nauk.-dosl. in-t zemlerobstva i
tvarinnitstva zakhidn. rayoniv UkrSSR, 1957, vyp.
2, 30-33.

Abstract: A computation of seed stocks of wild growing perennial
grasses which can be utilized either for a direct
conversion into meadows or for reproduction and se-
lection work in the L'vov oblast is given in this

Card : 1/2

Abs Jour: Ref Zhur-Biol., No 9, 1958, 39133.

paper. Seeds of wild grasses sometimes germinate better
in the fields than cultivated sorts and their produc-
tivity is higher, as a rule, especially in the second
year. The contents in raw albumin and the feed values
of cultivated and wild growing grasses are identical.
S. P. Gul'perina.

Card : 2/2

GORB, V.T., agronom

Work of a collective farm agronomist, Zemledelie 7 no. 5:34-37
Ny '59. (MIR: 12:7)

1. Kolkhoz imeni Jenina, Nove-Moskovskogo rayona, Dnepropetrovskoy
oblasti.
(Collective farms)

MOROZOV, N.G.; uchitel' (selo Klyuchevki, Chelyabinskoy oblasti);
PRUDNIKOV, S., uchitel'; GORB, Ye.V.; SIDORENKO, B.P., uchitel';
LAZAREV, V.; SVIDUNOVICH, A., uchitel'; RUBIN, M., metodist;
VASIL'YEV, Ye.T., uchitel'

Letters to the editors. Geog. v shkole 23 no. 6:67-69 N-D
'60. (MIRA 13:11)

1. 4-ya shkola shkoly g. Nevelya (for Prudnikov).
2. Direktor 16-y shkoly g. Vinnitsy (for Gorb).
3. 81-ya shkola g. Baku (for Sidorenko).
4. 11-ya shkola g. Tyumeni (for Lazarev).
5. Velemicheskaya shkola Brestskoy oblasti (for Svidunovich).
6. Vinnitskiy oblastnoy institut usovershenstvovaniya vrachey (for Rubin).
7. Sanitorno-lesnaya shkola poselka Klyuchi, Kamchatskoy oblasti (for Vasil'yev).

(Geography)

GORBACEV, S.

Formulation of the problem of calculation of concentration polarization and chemical polarization in M. Smutek's study. p. 615

CHEMICKE LISTY (Ceskoslovenska akademie ved. Ceskoslovenska spolecnost chemicksa) Praha, Czechoslovakia. Vol. 49, no. 4, Apr. 1955

no.1, Jan
Monthly List of East European Accessions (EEAI) EEC. Vol. 9/1960
Uncle.

GORBACEVSKI, V.

"New half trailer for lumber hauling", p. 89 (Analele Romano-Sovietice. Seria Silvicultura-Industria Lemnului Si A Hartiel., Series a II-a, v. 7, no. 15, Sept/Oct. 1952 Bucuresti)

East European Vol. 2, No 9
SO: Monthly List of ~~new~~ Acquisitions, Library of Congress, September 1953, Uncl.

GORBACH, A. M.

Improving the quality of rubber tires in the Kirov Rubber Tire
Plant. Kauch. i rez. 22 no. 11:47-49 N '63. (MIRA 17:2)

1. Kirovskiy shinnyy zavod.

GORBACH, A.V., inzh.

Calculation method for determining the most advantageous cutting
regime in grinding. Trudy VSTI no.1:141-159 '62.
(MIRA 17:11)

GORBACH, B.M., gornyy inzh.; KRUPPA, P.I., gornyy inzh.; MATOV, A.L., gornyy inzh.

Increasing the wear resistance of 1,600 and 2,000 mm wide conveyor belts. Gor. zhur. no. 10:46-49 0 '64. (MIRA 18:1)

1. Nove-Krivorozhskiy gornoobogatitel'nyy kombinat.

GORBACH, E.I.

Age groups, growth, and time of sexual maturation in *Ctenopharyngodon idella* (Val.) and *Mylopharyngodon piceus* (Rich.) in the basin of the Amur River. Vop. ikht. 1 no. 1:119-126 '61. (MIRA 14:5)

1. Laboratoriya presnovodnykh ryb Amurskogo otdeleniya Tikhookeanskogo nauchno-issledovatel'skogo instituta rybnogo khozyaystva i okeanografii, g. Khabarovsk.
(Amur Valley--Carp)

GORBACH, E.I.

Age groups, growth, and maturation rate of some predatory fishes of the Amur River. Izv. TINRO 48:164-178 '62.
(MIRA 16:4)

(Amur River—Fishes)

GORBACH, F.

Right to health is attained by struggle. Okhr.truda i sots.strakh.
4 no.11:42-44 N '61. (MIRA 14:12)
(France--Insurance, Social)

SHEVCHENKO, L.F.; PYASETSKAYA, Ye.N.; GORBACH, G.I.; SHUL'GA, O.Ye.

Study of outbreaks of epidemic hepatitis in two villages of Chernogov Province. Zhur.mikrobiol., epid.i immun. 40 no.12:114 D '63.
(MIRA 17:12)

1. Iz Kiyevskogo instituta epidemiologii i mikrobiologii i Chernigovskoy oblastnoy sanitarno-epidemiologicheskoy stantsii.

~~GOMBACH, I.P., kand. nauk.~~

~~How to increase the profitability of state fruit and berry farms
in the central part of the U.S.S.R. Dokl. TSKhA no.27:51-58 '57.
(Fruit culture) (MIRA 11:4)~~

GORBACH, I. F., kand. ekon. nauk.

Economic aspects and organization of state fruit and berry farms
in central regions of the U.S.S.R. [with summary in English]. Izv.
TKhA no. 2:229-237 '58. (MIRA 11:6)
(Fruit culture)

GORBACH, I.E.; kand.ekon.nauk

Economic effectiveness of capital investments in state fruit farms
of the central U.S.S.R. Izv. TSKhA no.1:184-191 '61. (MIRA 14:3)
(State farms—Finance)
(Fruit culture)

GORBACH, I.F., kand.ekon.nauk

Economic effectiveness of capital investments in state fruit
farms of the central U.S.S.R. Izv. TSKhM. no.1:184-191 '61.
(MIRA 14:3)
(State farms--Finance)(Fruit culture)

GORBACH, Ivan Fedossevich, kand.-ekon. nauk; MASHKINA, A., red.;
YAKOVLEV, L., tekhn. red.

[Problems in planning dairy husbandry] Voprosy planirovaniia
molochnogo zhivotnovodstva. Moskva, Mosk. rabochii, 1963.
101 p. (MIRA 16:7)

(Dairying--Economic aspects)

GORBACH, K.D., inzh.; LEDNEV, G.S., inzh.; ZAROVNY, V.M., tekhnik

Diesel locomotives are brought into the depot by low
voltage current. Elek. i tepl. tiaga 3 no.7:23 J1 '59.
(MIRA 13:3)

(Electric railroads--Repair shops)

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000516020014-2

AVERBUKH, A.G.; ZAYTSEV, V.I.; SUMERINA, E.P.; GORBACH, L.M.

New data on the geology of southern Moldavia. Sov. geol. 8 no.5;112-113
Mg '65. (MIRA 18:7)

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000516020014-2"

VIALOV, O.S., professor; VENOLINSKIY, I.V., nauchnyy sotrudnik; GOLEV,
B.T., assistent; GORETSKIY, V.A., dotsent; GORBACH, L.P., aspirant;
KUDRIN, L.N., assistent; GEL'FAND, M.Kh., redaktor izdatel'stva;
MALYAVKO, A.V., tekhnicheskij redaktor

[Geological museum of the Iv.Franko State University of Lvov; a
brief handbook] Geologicheskii musei L'vovskogo gosudarstvennogo
universiteta im. Iv.Franko; kratkii putesvoditel'. [L'vov] 1956.
29 p. (MLRA 9:8)

1. Lvov. Universitet.
(Lvov University) (Lvov--Geological museums)

GORBACH, L.P.

Discovery of crabs in menilitic shales of the eastern Carpathians.
Geol. sbor. [Lvov] no.2/3:307-312 '56. (MIRA 10:3)

1. L'vovskiy gosuniversitet imeni Ivana Franko.
(Carpathian Mountains—Crabs, Fossil)

GORBACH, L.P.

Macruridae from Oligocene deposits of Eastern Carpathians. Eshegod.
Vses. paleont. ob-va 16:286-289 '57. (MIRA 11:4)
(Chechva Valley-Grenadiers (Fish), Fossil)

GORBACH, L.P.

Some pelagic fishes from the Carpathian Oligocene.
Paleont.sbor. [Lvov] no.1:131-136 '61. (MIRA 15:9)

1. Institut mineral'nykh resursov AN UkrSSR, Simferopol'.
(Carpathian Mountains--Fishes, Fossil)

GORBACH, L.P.

Fossil fish of the Strenoptychidae family from menilite shales in the Carpathians. Paleont. zhur. no.4:168-170 '61. (MIRA 15:3)

1. Institut mineral'nykh resursov AN USSR.
(Carpathian Mountain region--Fishes, Fossil)

GORBACH, L.P.

Fossil fishes in the upper horizon of the lower Menilite series
of the Chechva River in the Eastern Carpathians. *Geol.sbor.*
[Lvov] no.7/8:421-426 '61. (MIRA 14:12)

1. Institut mineral'nykh resursov AN USSR, Simferopol'.
(Carpathian Mountain region—Fishes, Fossil)

GORBACH, L.P.

Venericardia excellens sp.nov. from the Lower Palaeocene in the Crimea. Paleont. zhur. no.1:160-163 '62. (MIRA 15:3)

1. Institut mineral'nykh resursov AN USSR, Simferopol'.
(Crimea--Mollusks, Fossil)

GORBACH, L.P.; PEDAN, L.S.

Siliceous septaria from a band of kill in the Upper Cretaceous
sediments of the Crimea. Min. sbor. no.17:75-81 '63. (MIRA 17:11)

1. Institut mineral'nykh resursov AN UkrSSR, Simferopol'.

AVERBUKH, A.G.; GORBACH, L.M.; SUMERINA, E.P.

Physical nature of waves arriving first, recorded in observations
by the correlation refracted wave method. Prikl. geofiz. no.36:
38-49 '63.

(Seismic waves) (MIRA 16:9)

VYALOV, O.S.; GORBACH, L.P. [Horbach, L.P.]; DOBROVOL'SKAYA, T.I.
[Dobrovols'ka, T.I.]

Fossil star-shaped prints of the activity of marine organisms in
the eastern Crimea. Geol. zhur. 24 no.4:92-97 '64.

l. Institut geologii i geokhimii goryuchikh iskopayemykh AN
UkrSSR. (MIRA 18:2)

GORBACH, L.P.; DOBROVOL'SKAYA, T.I.

Lower Cretaceous paleoseismic phenomena in the Crimea.
Dokl. AN SSSR 154 no. 3:590-591 Ja '64. (MIRA 17:5)

1. Predstavлено академиком V.S.Sobolevym.

VYALOV, O.S.; GORBACH, L.P.

Allomorphic sculpture of the Lower Paleocene oysters of
Inkerman (Crimea). Vest. L'vov. un. Ser. geol. no.2:25-31
'64. (MIRA 19:1)

EXCERPTA MEDICA Sec 8 Vol 12/8 Neurology Aug 59

3672. BIOELECTRICAL ACTIVITY OF THE BRAIN CORTEX IN THE PRESENCE OF TUMOURS OF THE POSTERIOR CRANIAL FOSSA (Russian text) -

Gorbach M. L. - FIZIOL. ZH. (Kiev) 1957, 2/6 (3-11)

The electrical activity of the brain cortex was investigated in 45 cases with proved posterior fossa tumours. All the observations were divided into 4 groups depending on the localization of the tumour in relation to the main anatomical structures of the posterior cranial fossa. The EEGs are divided into 3 types, reflecting the main stages of transition from a normal alpha rhythm to a well defined pathological disturbance of the record. There is every reason to suppose that the various degrees of slowing down of the basic rhythms recorded represent definite inhibition of the cerebral cortex. (S)

MAKARCHENKO, A.F. [Makarchenko, O.F.]; GORBACH, M.L. [Horbach, M.L.]

Some philosophical problems of the relation between physiology
and cybernetics. Fiziol. zhur. [Ukr.] 9 no.6:707-715 N-D '63.
(MIRA 17:8)

1. Institut fizioligii im. Bogomol'tsa AN UkrSSR, Kiyev.

GORBACH, M.M.

S/021/60/000/008/003/011
D210/D305

AUTHOR: Horbach, M.M.

TITLE: On the approximation of periodic functions of two variables by Fourier sums

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Dopovidi, no. 8, 1960, 1016 - 1018

TEXT: The aim of the paper is to give the asymptotic approximation for functions belonging to a class $K_1 K_2 W(r, l) H(\alpha, \beta)$. Definition:Function $f(x, y)$ belongs to the class $K_1 K_2 (r, l) H(\alpha, \beta)$. If it is periodic (period $= 2\pi$) with respect to each variable and satisfies the following conditions for $r, l \geq 0$, $l \geq r$, $0 < \alpha, \beta < 1$

$$|\varphi_1(x_2, y_2) - \varphi_1(x_1, y_1)| \leq K_1 |x_2 - x_1|^\alpha + K_2 |y_2 - y_1|^\beta, \\ |\varphi_2(x_2, 0) - \varphi_2(x_1, 0)| \leq K_1 |x_2 - x_1|^\alpha. \quad (1)$$

$$\varphi_1(x, y) = \frac{\partial f}{\partial y}, \quad \varphi_2(x, y) = \frac{\partial f}{\partial x}.$$

Card 1/5

S/021/60/000/008/003/011
D210/D305

On the approximation of ...

Let,

$$E_{mn} = \sup_{f \in K_1 K_2 W} \int_{(x,y)}^{(r,l)} H(\alpha, \beta) \max_{(x,y)} |f(x,y) - S_{mn}(f, x, y)|,$$

where $S_{mn}(f, x, y)$ - is the Fourier sum of order (mn) of function $f(x, y) f K_1 K_2 (r, l) H(\alpha, \beta)$. Theorem 1: For any $K_1 K_2 (r, l) H(\alpha, \beta)$ the asymptotic equality

$$E_{mn} = \frac{K_1 2^{n+1}}{\pi^4} \frac{\ln n}{n^{n+2}} \int_0^{\frac{\pi}{2}} u^n \sin u du + \frac{8 \ln n \ln m}{\pi^4} \int_0^{\frac{\pi}{2}} \int_0^{\frac{\pi}{2}} X$$

$$\times \min \left[K_1 \left(\frac{2u}{n} \right)^n, K_2 \left(\frac{2v}{m} \right)^m \right] \sin u \sin v du dv + \rho_{mn},$$

$$\rho_{mn} = O \left[\frac{\ln n + \ln m}{m^2} \left(\frac{1}{n^2} + \frac{1}{m^2} \right) \right] + O \left(\frac{1}{n^{n+2}} + \frac{1}{m^{m+2}} \right).$$

Card 2/5